an abstract of the species by Geoffroy, 'Stettiner Ent. Zeitung, xii. p. 132.

I cannot vouch for the identification, but the fact remains,—we have an unrecognised species, for which the name *lunulatum*, Geoff., may be used. I shall myself prefer to use *riparium*, Ol., for the species with pale bases to the antennæ, as it has been so used generally by Schaum and others. Of course it is *B. lunulatum* that is the "New British Species."

B. iricolor, it seems to me, is a mere synonym of *B. riparium*, as it has been recognised for the last thirty-three years; and I do not see that any confusion need arise whatever.

The Chestnuts, Shirley Warren, Southampton.

THREE NEW COCCIDÆ FROM THE ARID REGION OF NORTH AMERICA.

By T. D. A. Cockerell.

Fairmairia (subg. *Ceroplastodes*, nov.) *nivea*, n. sp.

Found at Montezuma R. R. Station, State of Chihuahua, Mexico. On the twigs of a spiny shrub (*Acacia?*) in some abundance; singly, or sometimes two close together, but then not at all coalescing.

Scale.—Length about 4 mm., height about 2½ mm., breadth nearly 3 mm. Rounded, with rather roughened surface, but no indication of plates; snow white, slightly shiny. The scales are very regularly formed; the white substance is thin, and not like the wax of *Ceroplastes*. There is a variable posterior cleft, which has its sides usually contiguous for its outer half, but apart inwardly, forming a distinct more or less oval aperture. The dorsum sometimes presents two very distinct knobs, conical, blunt, with concentric grooves or striæ; these are normal in greater or less degrees of development. The young larvæ are elongate, and look, on the twigs, rather like those of *Tachardia*.

Adult female.—The body (boiled in caustic soda) is brownish yellow, with the legs and antennæ pale brown. The side of the body presents a row of rather short stout spines. Antennæ seven-jointed: 1st very broad, nearly twice as broad as any other; 1st also longest; the other joints subequal, but 5 distinctly shortest; 6 emitting a stout bristle; 4 with a longer and more slender bristle; 7 with several hairs. The last joint is constricted about its middle. Femur short; trochanter with a long hair; tarsal clubbed hairs present, ordinary. Mouth-parts peculiar, in that the rostrum is divided longitudinally into two plates, the truncate or obscurely rounded ends of which each emit three spines, of which the two innermost spines of each plate are nearest to one another.

Larva.—Elongate-oval; legs with digitules and clubbed hairs. Posterior cleft distinct, with a pair of elongated tubercles, each emitting a bristle, which reaches about to the orifice of the cleft. Each side with about fifteen broad low processes, from which proceed short elongate processes, two to four on each. These structures remind one of the tufts of the very young larva of *Ceroplastes*, which afterwards go to form the waxy covering.

Egg.—Oval, dark madder-pink.

There is no known American genus which could contain this insect. It is related to *Fairmairia*, Signoret, founded on a single species from the South of France; and to *Inglisia*, Maskell, a New Zealand genus. I thought it might be referred to *Inglisia*, until I compared it with five species of that genus, kindly sent to me by Mr. Maskell. These species show characters of the scale, —the striation, semitransparency, &c., which do not occur in *F. nivea*. While they differ considerably from one another, they have a facies of their own, and apart from the difficulty of accounting for the presence of an *Inglisia* in Mexico, I do not think the scale now described can be placed in Maskell's genus.

On the other hand, our scale is not altogether like that of *Fairmairia;* but it seems best to leave it in that genus for the present, placing it in a subgenus *Ceroplastodes*, which is characterised by the more or less hemispherical scale with dorsal knobs, the divided rostrum, and the seven-jointed antennæ.

If necessary, this name can be used in a generic sense. An orange-coloured mite was found associated with *F. nivea*.

Ceroplastes irregularis, n. sp.

Found six miles north of Montezuma R. R. Station, State of Chihuahua, Mexico, on stems of *Artemisia*.*

Scale.—About 5 mm. long or less, hemispherical, moderately depressed, but extremely irregular, and in many cases almost shapeless, appearing like a mass of cereous nodules. Colour pale ochreous. No definable plates. Dorsal knob inconspicuous. Adjacent scales often running together. This is by far the most shapeless and nodulose *Ceroplastes* I have seen.

Adult female.—Derm yellow-brown, perforated in most parts by large holes or gland-pores. Legs present; trochanter with a long hair; femur about as long as tibia; tarsus nearly as long as tibia, the long tarsal bristle of larva represented by a short stout spine.

Egg (in soda).—Oval, brown.

Larva.—Elongate, boat-shaped in outline, widely cleft posteriorly, legs long. Caudal filaments moderately long; diverging, but curving inwards towards their ends; each with a small bristle on its inner side (*i. e.*, on the margin caudad of it), and with two small bristles cephalad. Tarsus of hind leg with a very long bristle; knobbed hairs of tarsus slender and remarkably long; digitules of claw also slender and long. Antennæ six-jointed: 3 and 6 longest; 6 variable, sometimes about as long as 3, usually shorter. In some, joint 3 shows a false joint, or tendency to split into two. Last joint with a long hair.

I quite expected that this would prove identical with the undescribed *C. artemisiæ*, Riley MS.; but on sending specimens to Prof. Riley, I was informed that it was distinct. *C. artemisiæ* was found in New Mexico; it is unknown to me.

* Since writing the above, I have had my doubts about the food-plant. It was not in flower, and I think it may have been *Sarcobatus*. Consequently I have changed the specific name which connected the insect with *Artemisia*.

Pseudococcus helianthi, n. sp.

On a young *Helianthus*, on the leaves, attended by ants; afterwards on other sunflowers, and more numerously on a narrow-leaved species of compositæ, not in flower. Las Cruces, New Mexico, U.S.A.; alt. 3800 feet; July 1st—20th, 1893. Young were hatching July 9th.

Female.—Three mm. long or a little over. Grey, covered above and at sides with white mealy secretion; segmentation distinct; legs pale brown; antennæ very slender, pale brown. Caudal appendages thickly clothed with secretion, short, less than half length of body. Lateral appendages well clothed with secretion, short but distinct, more or less pointing backwards, instead of being at right angles to margin. Anterior appendages (= first laterals) rather more conspicuous than the laterals. No bands or marks. The body has three obscure longitudinal ridges, one mid-dorsal, the others sub-lateral. The general appearance is like Signoret's figure of *Dactylopius citri*. Boiled in caustic soda, it does not stain the liquid. Derm with many gland-dots. Antennæ nine-jointed; 2nd joint longer than 3rd (as in *P. socius*). Specimens examined showed some slight variation in the proportions of the joints, thus:—(1) Specimen from *Helianthus*. Joint 2 longer than 3; 3 longer than 4; 5 longer than 4, but rather shorter than 3; 6 equal to 4; 7 and 8 shortest; 9 about as long as 5. Formula therefore 23 (59) (46) (78). (2) Specimen from Composite plant with narrow leaves: 5 longer than 4; 2 longer than 3; 9 longer than 5, but shorter than 3. Formula 239 (56) (478). Eyes raised on tubercles, concolorous with body (after boiling in soda). Trochanter with a fairly long bristle. Femur stout, with several short bristles. Tibia slender, about as long as femur, bristly. Tarsus about half length of tibia. Digitules hardly discernible; apparently no tarsal clubbed hairs. Anal ring with eight hairs, but one smaller than the rest. Coxa and trochanter with several small bristles. A female found on sunflower was observed on July 7th to have constructed its sac:—Sac cottony, snow-white, about 5 mm. long; the body of the insect, now pale brownish, projects from the sac at one end. Sides of sac parallel, the cottony matter much looser on the back than at the sides. Without the sac, the insect looks like a *Dactylopius;* with it, it might be taken at a superficial glance for *Pulvinaria*. Newly-hatched larva pale yellow.

Las Cruces, New Mexico, U.S.A., July 21, 1893.

NOTES ON THE SYNONYMY OF NOCTUID MOTHS.

By Arthur G. Butler, Ph.D., F.L.S., &c.

(Continued from p. 293).

Spirama martha.

Hypopyra martha, Butler, Ann. & Mag. Nat. Hist. ser. 5, vol. i. p. 292 (1878); Ill. Typ. Lep. Hist. iii. 41, pl. xxxiv. fig. 3.

Spirama ægrota, Butler, Trans. Ent. Soc. 1881, p. 197, n. 86. Japan. Types in Coll. B. M.